

EXHIBIT C  
 TRIAD FAMILY NETWORK, INCORPORATED  
DIRECTIONAL ANTENNA TABULATED DATA

(FIGURE 1)

Azimuth	Relative field	Power in dBkW	Power in watts
0°	1.000	8.4	6 918
10°	0.988	8.3	6 760
20°	0.966	8.1	6 456
30°	1.000	8.4	6 918
40°	0.988	8.3	6 760
45°	0.955	8.0	6 309
50°	0.933	7.8	6 025
60°	0.861	7.1	5 128
70°	0.759	6.0	3 981
80°	0.653	4.7	2 951
90°	0.603	3.4	2 511
100°	0.468	1.8	1 513
110°	0.389	0.2	1 047
120°	0.309	-1.8	661
130°	0.260	-3.3	467
135°	0.248	-3.7	426
140°	0.240	-4.0	398
150°	0.234	-4.2	380
160°	0.240	-4.0	398
170°	0.248	-3.7	426
180°	0.254	-3.5	446
190°	0.248	-3.7	426
200°	0.240	-4.0	398
210°	0.234	-4.2	380
220°	0.240	-4.0	398
225°	0.248	-3.7	426
230°	0.260	-3.3	467
240°	0.309	-1.8	661
250°	0.389	0.2	1 047
260°	0.468	1.8	1 513
270°	0.603	3.4	2 511
280°	0.653	4.7	2 951
290°	0.759	6.0	3 981
300°	0.861	7.1	5 128
310°	0.933	7.8	6 025
315°	0.955	8.0	6 309
320°	0.988	8.3	6 760
330°	1.000	8.4	6 918
340°	0.966	8.1	6 456
350°	0.988	8.3	6 760

Pattern maxima:

0°	(1.000)
30°	(1.000)
180°	(0.254)

Pattern minima:

20°	(0.966)
150°	(0.234)
210°	(0.234)

Field gain 4.65



EXHIBIT D  
TRIAD FAMILY NETWORK, INCORPORATED

INTERMODULATION PRODUCTS STUDY

The following study is to show that there will be no noxious intermodulation products produced from those operating FM or TV facilities within 10.0 km. The methodology is to reveal those FM or TV facilities which are within 10 km, and compute the expected intermodulation products. These include 1) twice the desired frequency subtracted from the undesired frequency; 2) twice the undesired frequency subtracted from the desired frequency; and 3) those which are IF related to 1 and 2 above (should they fall on a station in use in the local area).

Exhibit G contains a general allocation study and included within it is an exhibit entitled "MISCELLANEOUS ALLOCATION STUDY - TV6, INTERMOD, FM IF." This reveals that the following are within 10 km of the proposed facility:

- 1) WFDD Winston-Salem, NC 3.22 km @ 236.2° T

Note: They are not operating from this site, they are operating from another site (beyond 10 km) on STA, and have a CP for a third site.

Intermodulation products: 87.7 mc (not an FM frequency)  
See TV-6 study (Exhibit G)  
152.3 km from WVVA Bluefield  
101.3 km to WVVA 47 dBuV contour  
No problem expected (51 km separation)

90.1 mc  
WNAA Greensboro, NC (43 km @ 93° T)  
WNAA 60 dBuV 37 km  
Intermodulation not expected to be a problem (WNAA on "far" side of WFDD)

100.7 mc (IF)  
WQQX Christiansburg, VA 114.1 km @ 355° T  
60 dBu 28.5 km - no problem

100.9 mc (IF)  
WIFM Elkin, NC 58.6 km @ 285.3° T  
60 dBu 28.5 km - no problem

- 2) WSNC Winston-Salem, NC 2.99 km @ 135.35° T 10 kw 59 m HAAT

Note: It is unknown if they have built this CP but we assume they have. Their previous facility was 0.12 kw and 28 m nearby.

Intermodulation products: 91.7 mc

EXHIBIT D

INTERMODULATION PRODUCTS STUDY, PAGE 2

91.7 mc not a problem in this area.  
It cannot be used as the intermod  
area is well within 96 km of WKRR  
Asheboro, NC (92.3).

88.1 mc  
WPAR Hickory, NC  
91.86 km @ 242.4° T  
60 dBuV contour: 28.5 km distant  
No intermodulation problems

I.F.  
98.7 WKSI Greensboro, NC  
40.98 km @ 117.27° T  
This one may be a slight problem  
for receivers with less than 30 dB  
image rejection (not likely). Otherwise  
no intermodulation problem expected.

98.9 Not in use in this area (WKSI  
local station)

88.3 Not in use in this area (adjacent  
to WFDD)

3) WFDD Winston-Salem, NC I.F. (neglected in (1))

98.3 (WTHP) Thomasville, NC  
Not a problem: again, IF selectivity  
should take care of this in the  
receiver. (WTHP already has problems  
being grossly short spaced to WKSI)

98.5 Not in use in this area (adjacent  
to WTHP and WKSI)

It is firmly believed that the intermodulation products falling on the receiver I.F. (that is, receiver tuned to IF where an intermod product is an image) will not be a problem with either WTHP or WKSI, as most tuners have better than 30 dB image rejection. However, in the extremely unlikely event that intermodulation of the proposed Triad Family Network facility would occur with any other station, Triad Family Network would assume full responsibility for the elimination of objectionable interference, whether transmitter induced at WFDD or WSNC, or receiver induced.

# SITE MAP

NEW FM, WINSTON -  
SALEM

NC

TRIAD FAMILY NETWORK

207C3 89.3 MC

6.92 kW



REPRODUCED BY  
RUPAL HALL

DEP

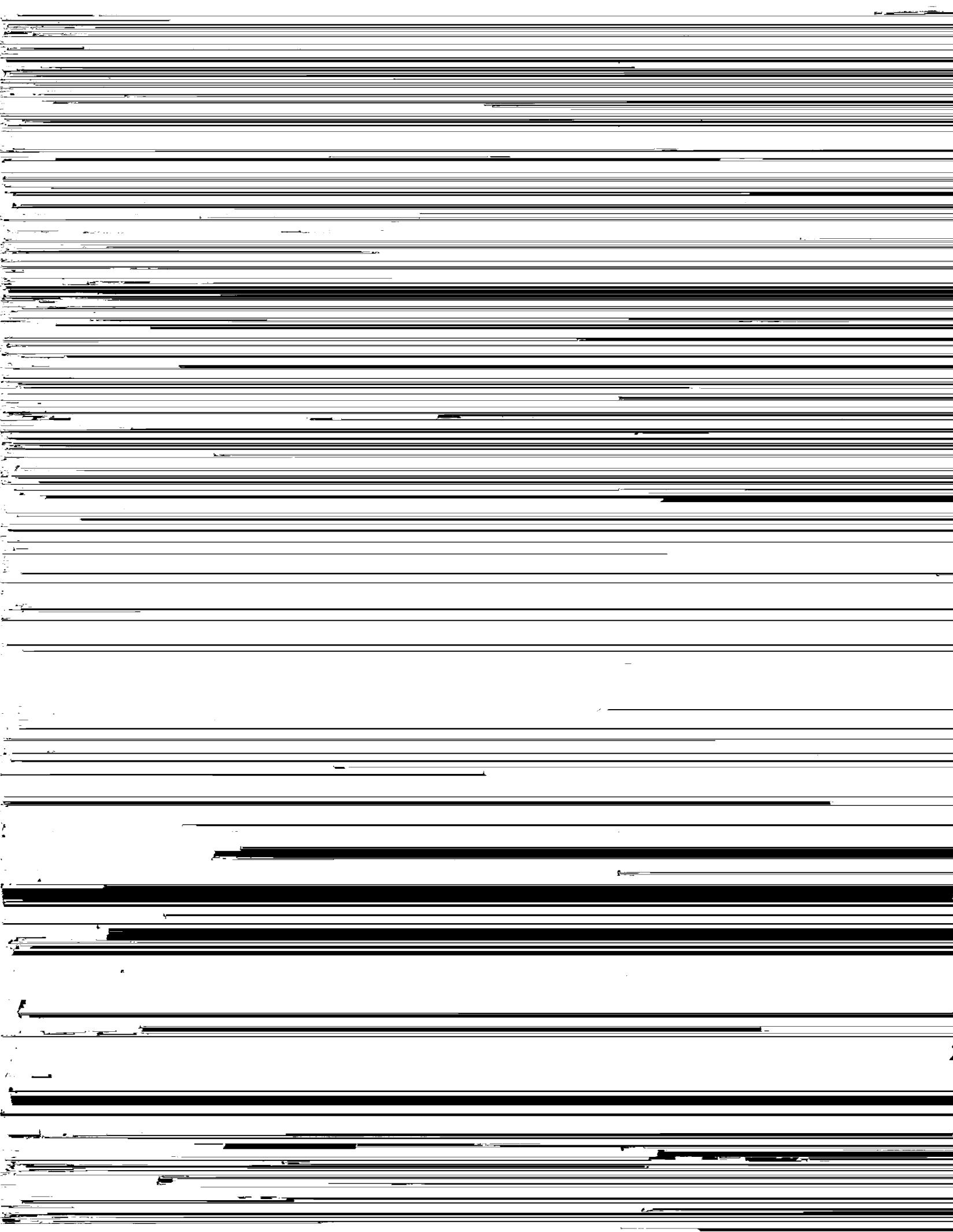
4956 11 SE  
WINSTON-SALEM WEST)

16 MI. TO U.S. 64  
FRIEDBURG 58 MI.

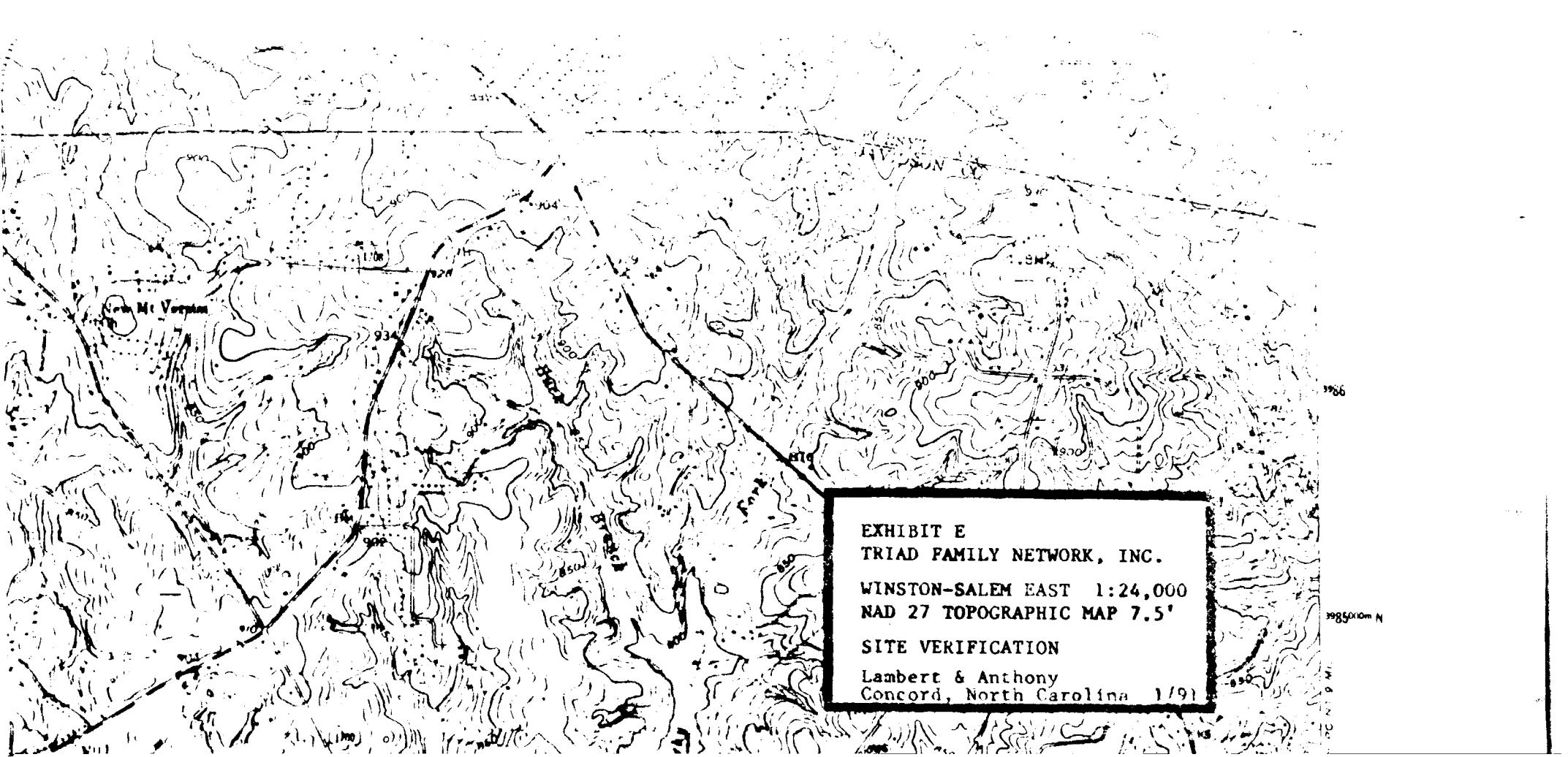
164

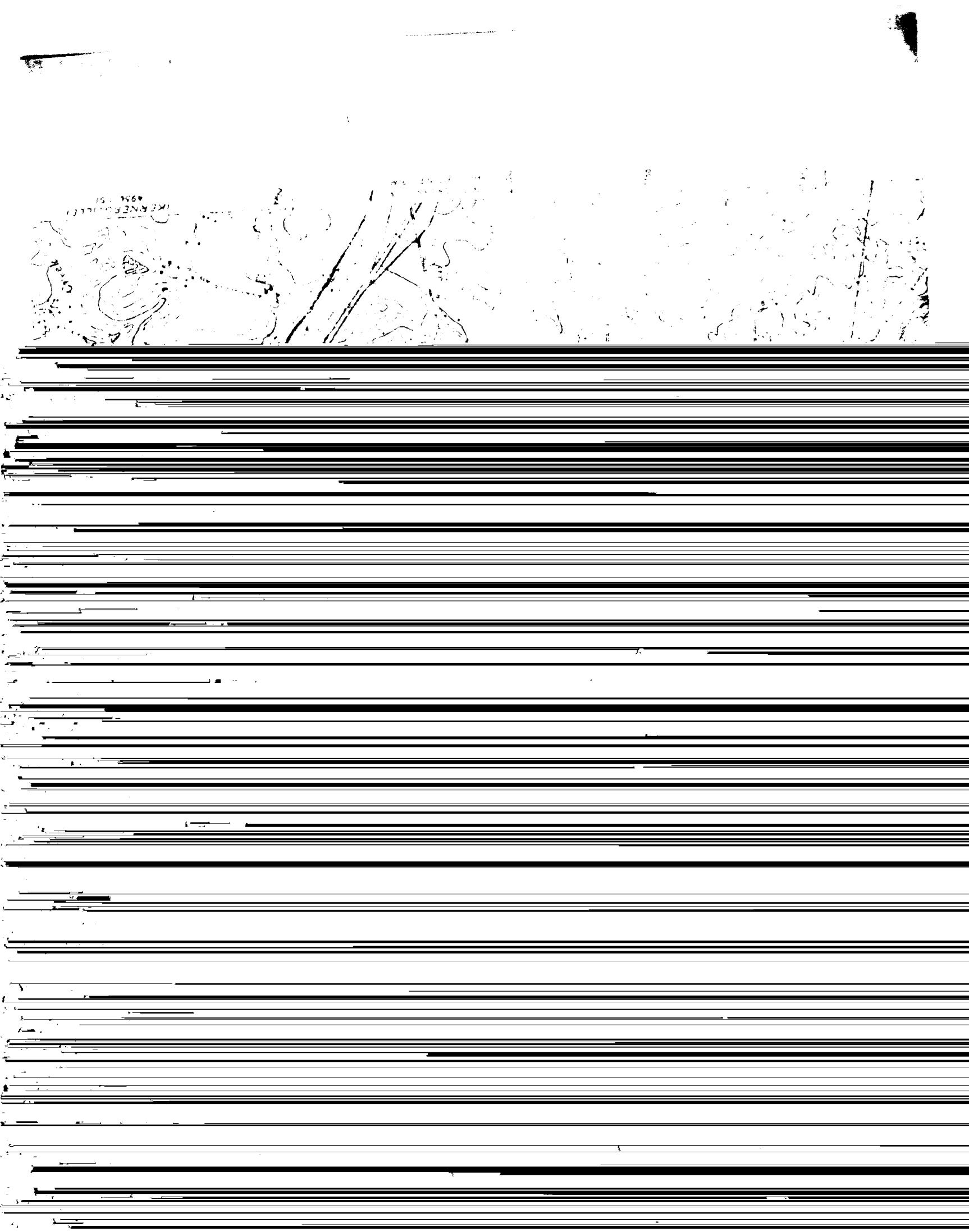
5

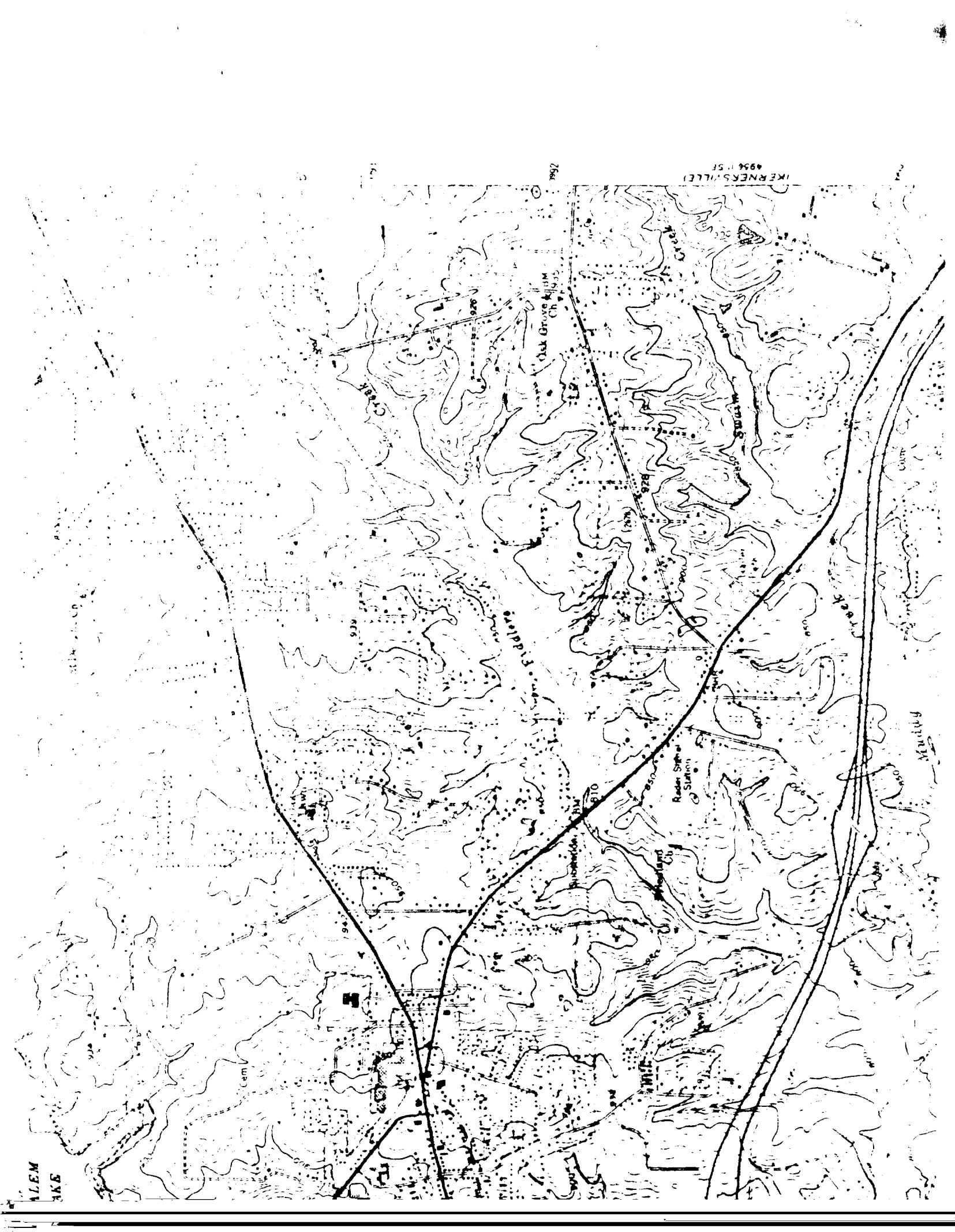
164





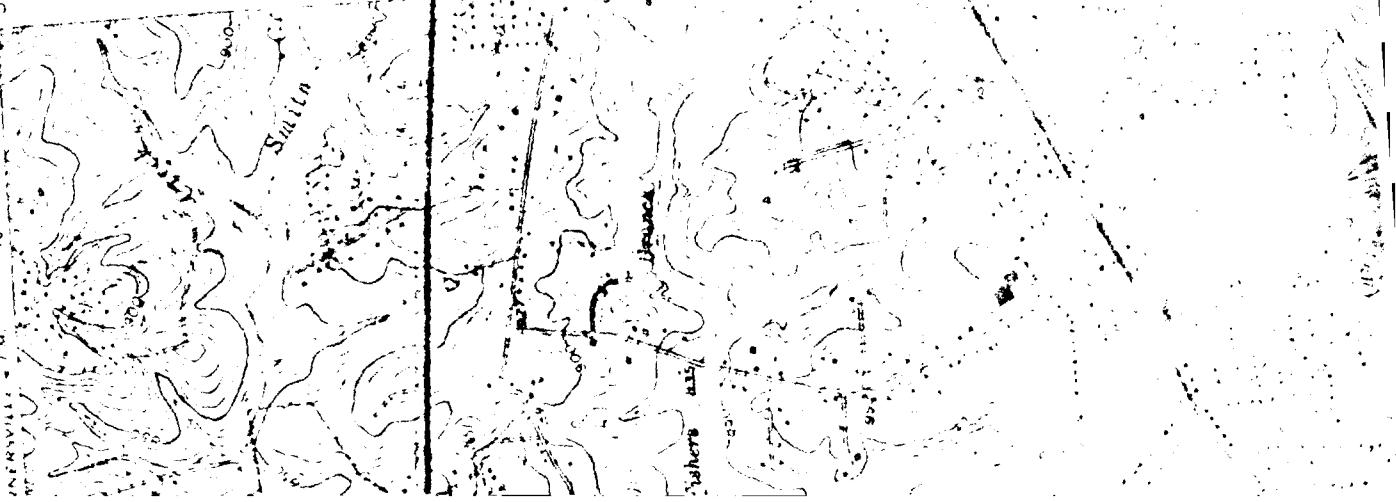






LEM EAST QUADRANGLE

NORTH CAROLINA  
TOPOGRAPHIC  
MAP SERIES  
1:250,000  
1987  
35°30'N 79°30'



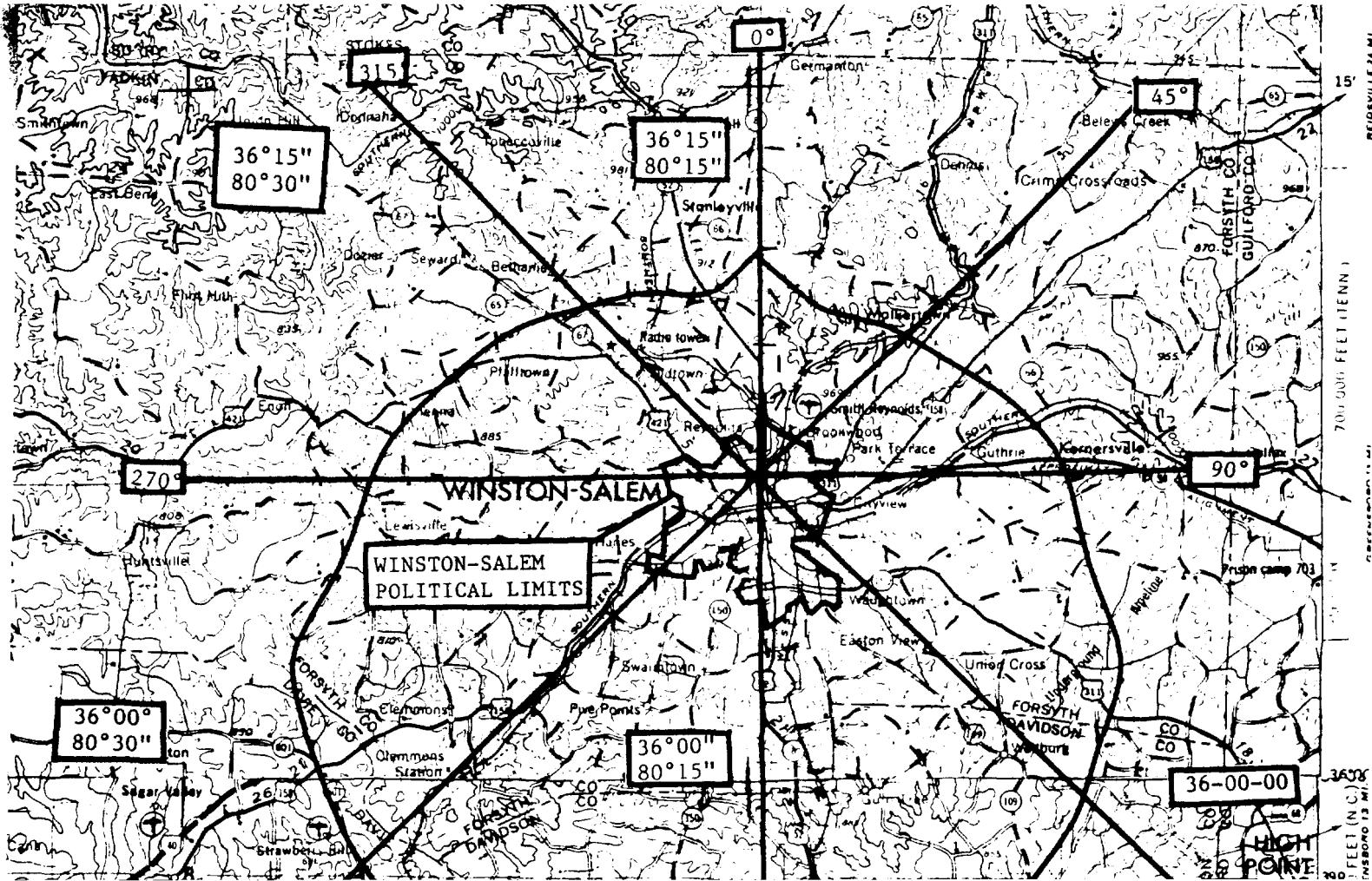


EXHIBIT G  
TRIAD FAMILY NETWORK, INCORPORATED

FM ALLOCATION STUDY

This exhibit will demonstrate that the proposed facilities of Triad Family Network, Incorporated fully meet the contour (or distance where applicable) separation and protection requirements of 47CFR 73.509(a) of the Rules.

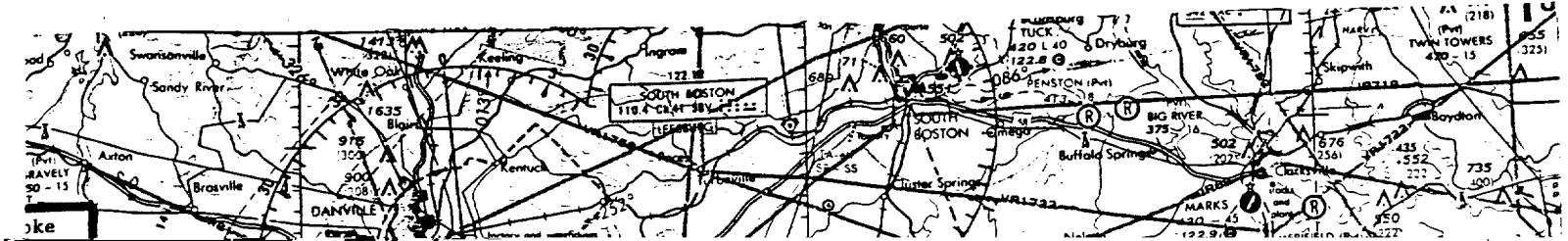
This study was performed by obtaining from a commercial time-sharing database a list of all facilities which would be affected by the proposed use of channel 207C3 at Winston-Salem, North Carolina. Figure 1 is a copy of the original database study on which is entered those stations which can be excluded immediately from further study (because the contour separation is so great) and those which require intensive study.

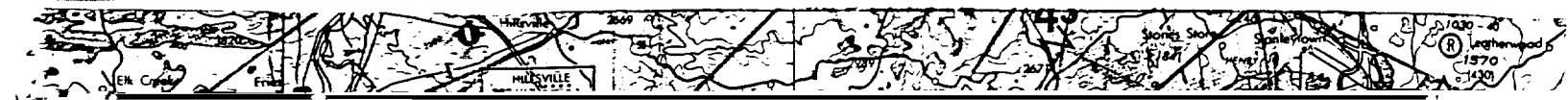
The stations requiring intensive study were then subject to scrutiny to determine the actual protected and interfering contours. In most cases, this was done by performing a 30 second linearly interpolated database run to determine the HAAT towards the proposed facility for 5 or 10 degree increments. The database used was a commercial time-shared system running the NGDC datapoint file, linearly interpolated.

Finally, the last figure in this Exhibit, is a map showing the relationship of all the "close" stations to the proposed TFN operation. It shows conclusively that the proposed operation with the proposed directional antenna fully protects all facilities and receives no prohibited overlap from any other station.

The basis for this map can be found as figures 2 and 3, which show the proposed interfering and coverage contours, respectively, for every 10 degrees of arc plus the standard 8-radials used to calculate the base HAAT. Figure 4 is the terrain retrieval for the standard 8 radial HAAT. Figure 5 is a miscellaneous allocation study used in preparing the intermodulation report (Exhibit D) as well as the TV-6 study (later in this Exhibit).

Those stations which obviously cleared were compared under much more conservative rules than the Commission require (e.g. where a second adjacent would clear our 40 dBu with its 60 dBu, obviously no 60/80 or 80/60 overlap can occur. This simplifies exclusion and the amount of calculations). These situations are also shown on the allocation map where required.





Mr. David Anthony  
Concord, North Carolina

Page 1  
January 13, 1991

FM Database listing

TITLE: Phil Watson (89.3)

City of license	St	Call	Chan	Rec date	H-kW	V-kW	Latitude	Dist.
Licensee name				Auth FCC file no.	H-m	V-m	Longitude	Bear.
FAYETTEVILLE	NC	NEW-T	203FT	01/09/90			35-04-46	164.96
BIBLE BROADCASTING NETWORK INC			APC BPFT-891023TG				78-55-58	133.57
Translator for WYFL, HENDERSON, NC;			Cut-off	02/02/90				

WINSTON-SALEM NC WFDD #203C1 10/09/87 100 100 36-05-35 3.16  
WAKE FOREST UNIVERSITY LIC BLED-820921AM 118 118 80-16-31 235.43  
Format: CLS; Network: AMP NPR; Air date: 03/13/81; Was WFDD-FM 09/23/87

WINSTON-SALEM NC WFDD #203C1 12/19/89 38.0 38.0 35-55-02 21.71  
WAKE FOREST UNIVERSITY CP BPED-881230MB 346 346 80-17-37 191.27  
Format: CLS; Network: AMP NPR; Air date: 03/13/81; CP Granted 12/06/89;  
Was WFDD-FM 09/23/87

BLOUNTVILLE TN WPGB #203A 06/05/90 .47 .47 36-30-44 196.49  
BLOUNTVILLE EDUC ASSOCIATION INCCP BPED-840404IA 64 64 82-22-38 283.84  
CP Granted 04/02/90 per FCC release #20828 dated 04/10/90;  
Call Granted 06/01/90 per FCC release #135 dated 06/01/90

DURHAM NC WXDU #204A 01/30/84 1.30 1.30 36-02-08 105.37  
DUKE UNIVERSITY LIC BLED-831204AG 90 90 79-04-48 94.12  
Format: DIV; Network: AP; Air date: 11/83

DURHAM NC WXDU #204A 07/05/84 1.62 1.37 36-02-08 105.37  
DUKE UNIVERSITY CP 90 90 79-04-48 94.12  
Format: DIV; Network: AP; Air date: 11/83

SPINDALE NC WNCD #204C 02/14/90 17.0 10.5 35-44-05 188.68  
ISOTHERMAL COMMUNITY COLLEGE LIC BLED-891002KA 931 931 82-17-10 257.83  
Call Granted 03/31/87;  
License Granted 01/23/90 per FCC release #20782 dated 02/05/90

RALEIGH NC WSHA #205C2 04/15/87 25.5 25.5 35-46-15 150.04  
SHAW UNIVERSITY LIC BLED-800128AA 35 35 78-38-10 104.07  
Format: JAZ; Air date: 11/18/88

ROCK HILL SC WNSC-FM #205C1 04/15/87 97.0 97.0 34-50-24 157.26  
SOUTH CAROLINA ED TV COMMISSION LIC BLED-1800 183 183 81-01-07 206.58  
Format: CLS; Network: NPR; Air date: 01/03/78

FAYETTEVILLE NC WFSS #206C1 04/15/87 100 100 35-04-22 168.23  
FAYETTEVILLE STATE UNIVERSITY CP BPED-830119AG 107 107 78-53-27 132.84  
FROM #201D AND TO #220C1; Format: JAZ; Network: AMP NPR; Air date: 12/02/77

ROANOKE VA WVTF #206C 05/14/82 100 100 37-11-56 121.20  
VPI EDUC FOUNDATION LIC 600 600 80-09-02 4.01  
Format: CLS; Network: AMP NPR; Air date: 08/01/73

CHAPEL HILL NC WXYC #207A 06/29/83 .40 .40 35-54-15 110.46  
STUDENT EDUCATIONAL BCG INC LIC BLED-1672 85 85 79-02-50 101.58  
Format: CHR; Air date: 03/18/77

Exhibit G Figure 1

TRIAD FAMILY NETWORK, INC  
Allocation Study - Exclusion  
of Obviously Cleared Facilities

Channel 203 not considered.

WXDU 60 dBuV (worst case) 22 km  
Distance to prop. 40 dBu 54 km  
Obviously cleared (100/60 reqd.)

Ditto.

Way beyond range (3rd adj C3-C  
is only 96 km)

WSHA 60 dBu 28.7 km max  
Prop. 40 dBu 53.5 km max  
Obviously cleared (60/80 reqd.)

WNSC 60 dBu: 61.2 km max  
Prop. 40 dBu: 81.6 km  
Obviously clears (60/80 reqd.)

WFSS 54 dBu : 86 km worst case  
Prop 40 dBu : 72 km  
Obviously clears ( 60/54 reqd.)

\*\*INTENSIVE STUDY

WXYC 40 dBu 45.9 Prop 60 19.6  
Clears 44.96 km  
WXYC 60 dBu 13.6 Prop.40 53.5  
Clears 43.36 km

## Exhibit G Figure 1

TRIAD FAMILY NETWORK, INC  
Allocation study - Exclusion  
of Obviously Cleared Facilities

Mr. David Anthony  
Concord, North Carolina

Page 2  
January 13, 1991

## FM Database listing

TITLE: Phil Watson (89.3)

City of license	St	Call	Chan	Rec date	H-kW	V-kW	Latitude	Dist.
Licensee name				Auth FCC file no.	H-m	V-m	Longitude	Bear.
ELON COLLEGE	NC	WSOE	#207A	02/21/85	.50	.50	36-06-25	66.64
ELON COLLEGE			LIC	BLED-840126AD	37	37	79-30-22	89.99

Format: DIV; Air date: 11/78

JOHNSON CITY	TN	WETS	#208C	03/10/83	66.0	66.0	36-26-02	173.50
EAST TENNESSEE STATE UNIVERSITY	LIC	BLED-820212AA		692	692	82-08-08	282.59	

Format: DIV; Network: NPR; Air date: 02/26/74

RALEIGH	NC	WCPE	#209C2	04/15/87	33.0	33.0	35-50-47	147.41
EDUCATIONAL INFORMATION CORP		LIC	BLED-820823AB		83	83	78-38-38	100.98

Format: CLS; Air date: 07/17/78

RALEIGH	NC	WCPE	#209C1	04/04/89	100	100	35-56-25	160.36
EDUCATIONAL INFORMATION CORP		APC	BPED-840328CA		207	207	78-28-45	98.22

PET FOR RECON FILED 3/3/89; Format: CLS; Air date: 07/17/78; Amended 10/08/86;  
Cut-off 09/26/86 A-118

ROANOKE, ETC.	VA	W209AG	209FT	03/25/88	.020		37-13-56	125.86
VIRGINIA TECH FOUNDATION, INC.	LIC	BLFT-880209TD				80-02-51	8.02	

Translator for WVT, ROANOKE, VA

DAVIDSON	NC	WDAV	#210C1	03/27/90	100	100	35-26-55	90.82
TRUSTEES OF DAVIDSON COLLEGE		LIC	BLED-890525KF		107	107	80-50-24	216.27

Format: CLS; Network: AMP; Air date: 09/01/73;  
License Granted 03/07/90 per FCC release #20812 dated 03/19/90

DAVIDSON	NC	WDAV	#210C1	03/27/90	100	100	35-26-55	90.82
TRUSTEES OF DAVIDSON COLLEGE	CP	BMPED-891107IA		108	108	80-50-24	216.27	

Format: CLS; Network: AMP; Air date: 09/01/73;  
CP Granted 03/08/90 per FCC release #20814 dated 03/21/90

SOUTHERN PINES	NC	W210AC	210FT	03/28/89	.008		35-11-46	126.31
BIBLES BROADCASTING NETWORK INC	LIC	BLFT-B90315TA				79-24-46	143.19	

Translator for WHPE-FM, HIGH POINT, NC

DANVILLE	VA	W210AD	210FT	10/23/90	.019		36-42-20	98.20
MOODY BIBLE INSTITUTE OF CHICAGO	CP	BPFT-890201TD				79-26-14	47.28	

Translator for WMBI-FM, CHICAGO, IL;  
CP Granted 10/12/90 per FCC release #20972 dated 10/18/90

FERRUM	VA	WFFC	#210A	10/10/89	.100	.100	36-55-46	93.15
FERRUM COLLEGE		LIC	BLED-890201KF		-11	-11	80-01-27	12.22

LEXINGTON	VA	NEW	#210A	10/02/90	.100	.100	37-47-22	199.90
JAMES MADISON UNIVERSITY	APP	900920MB			-59	-59	79-26-11	20.83

Tendered per FCC release #14829 dated 09/27/90

RADFORD	VA	WVRU	#210A	12/04/80	.50	.50	37-08-26	117.67
RADFORD COLLEGE	LIC				5	5	80-33-11	346.67

Format: CLS; Air date: 10/09/78

WSOE SHOWN ON ALLOC MAP

WSOE 60	12.0	Prop 40	53.5	worst
Clears	1.14 km			case
WSOE 40	35.0	Prop 60	19.6	worst
Clears	12.0 km			case

## \*\*\* INTENSIVE STUDY

Obviously clears (60 comes nowhere near our 40 - see map and basis on following pages)

Ditto

Doesn't count - translator

WDAV 60 dBuV clears our 60 dBuV  
Intensively studied on our map  
100/60 and 60/100 required

Ditto

ND antenna assumed both cases

Translator

Translator

WFFC 60 5.7 km  
Prop 60 8.0 km clears 79.8  
(100/60 and 60/100 required)

NEW 5.7 km  
Prop. 8.0 clears 186.2,  
100/60 and 60/100 required

WVRU 60 9.0 km  
Prop 60 8.5 km Clears 100.1 km  
(100/60 and 60/100 required)

Lambert & Anthony, Consulting Engineers  
 F(50,10) Interference Contours - Triad Family Network, Inc.  
 89.3 mv  
 Directional antenna - Cetec JLCP - 4 DA (pattern C)  
 Field gain 4.26

Radiation center 301m AMSL (38m AGL)

AZ (degs)	HAAT (m)	ERP (dBk)	CONTOUR LEVELS (dBu):	100.0	80.0	54.0	40.0
.0	37	-3.50	.9	2.9	13.0	31.1	
10.0	24	-3.70	.8	2.6	11.5	27.9	
.00	21	-4.00	.8	2.5	11.3	27.4	
30.0	27	-4.20	.8	2.5	11.2	27.0	
40.0	24	-4.00	.8	2.5	11.3	27.4	
45.0	29	-3.70	.8	2.6	11.5	27.9	
50.0	22	-3.30	.8	2.6	11.8	28.6	
60.0	28	-1.80	.9	2.9	12.9	31.4	
70.0	28	.20	1.0	3.2	14.6	36.7	
80.0	30	1.80	1.1	3.5	16.1	41.9	
90.0	31	3.40	1.2	3.9	18.0	47.9	
100.0	31	4.70	1.3	4.2	19.6	53.5	
110.0	33	6.00	1.5	4.7	22.1	60.9	
120.0	34	7.10	1.6	5.0	24.1	66.7	
130.0	38	7.80	1.8	5.6	26.6	71.5	
135.0	39	8.00	1.8	5.7	27.3	72.9	
140.0	42	8.30	2.0	6.0	28.9	75.6	
150.0	45	8.40	2.0	6.2	30.1	77.1	
50.0	51	8.10	2.1	6.5	31.5	77.7	
-70.0	51	8.30	2.1	6.6	31.9	78.7	
180.0	54	8.40	2.2	6.9	33.1	80.1	
190.0	62	8.30	2.3	7.3	35.3	81.5	
200.0	66	8.10	2.4	7.5	36.0	81.6	
210.0	69	8.40	2.4	7.8	37.5	83.3	
220.0	64	8.30	2.4	7.5	35.9	81.9	
225.0	60	8.00	2.3	7.1	34.0	79.7	
230.0	60	7.80	2.2	7.0	33.6	78.8	
240.0	57	7.10	2.1	6.5	31.3	74.8	
250.0	58	6.00	2.0	6.2	29.6	70.6	
260.0	53	4.70	1.8	5.5	26.1	64.4	
270.0	48	3.40	1.6	4.9	22.8	57.3	
280.0	48	1.80	1.4	4.4	20.7	51.8	
290.0	48	.20	1.3	4.0	18.8	46.5	
300.0	49	-1.80	1.1	3.6	16.8	40.1	
310.0	46	-3.30	1.0	3.2	14.8	35.3	
315.0	42	-3.70	.9	3.0	13.8	32.9	
320.0	42	-4.00	.9	3.0	13.5	32.2	
330.0	34	-4.20	.8	2.6	11.9	28.5	
340.0	31	-4.00	.8	2.5	11.4	27.6	
350.0	31	-3.70	.8	2.6	11.6	28.1	

Exhibit G Figure 3  
TRIAD FAMILY NETWORK, INC

Lambert & Anthony, Consulting Engineers  
 F(50,50) Coverage Contours - Triad Family Network, Inc.  
 89.3 mc  
 Directional Antenna - Cetec JLCP-4DA, Pattern C  
 Field gain 4.26

Radiation center 301 m AMSL (38 m AGL)

AZ (degs)	HAAT (m)	ERP (dBk)	CONTOUR LEVELS (dBu):			
			70.0	60.0	54.0	50.0
.0	37	-3.50	5.1	9.0	12.8	16.1
10.0	24	-3.70	4.6	8.2	11.5	14.6
20.0	21	-4.00	4.5	8.0	11.3	14.3
30.0	27	-4.20	4.4	8.0	11.2	14.1
40.0	24	-4.00	4.5	8.0	11.3	14.3
45.0	19	-3.70	4.6	8.2	11.5	14.6
50.0	22	-3.30	4.7	8.4	11.8	14.9
60.0	28	-1.80	5.1	9.1	12.9	16.3
70.0	28	.20	5.7	10.2	14.5	18.3
80.0	30	1.80	6.3	11.2	15.9	20.1
90.0	31	3.40	7.0	12.4	17.6	22.2
100.0	31	4.70	7.5	13.3	18.9	23.8
110.0	33	6.00	8.3	14.8	21.0	26.2
120.0	34	7.10	9.0	16.1	22.8	28.2
130.0	38	7.80	9.9	17.7	24.8	30.6
135.0	39	8.00	10.2	18.1	25.5	31.4
140.0	42	8.30	10.8	19.2	26.8	33.1
150.0	45	8.40	11.3	20.0	27.8	34.4
160.0	51	8.10	11.8	20.9	29.0	35.8
170.0	51	8.30	11.9	21.1	29.3	36.1
180.0	54	8.40	12.3	21.8	30.2	37.2
190.0	62	8.30	13.2	23.5	32.2	39.6
200.0	66	8.10	13.5	24.0	32.8	40.3
210.0	69	8.40	13.9	24.8	33.8	41.4
220.0	64	8.30	13.3	23.7	32.5	40.0
225.0	60	8.00	12.7	22.6	31.1	38.3
230.0	60	7.80	12.6	22.4	30.9	38.0
240.0	57	7.10	11.7	20.8	28.9	35.6
250.0	58	6.00	11.1	19.9	27.7	34.1
260.0	53	4.70	9.8	17.4	24.6	30.4
270.0	48	3.40	8.6	15.4	21.7	27.1
280.0	48	1.80	7.8	14.1	19.8	24.9
290.0	48	.20	7.2	12.9	18.1	22.8
300.0	49	-1.80	6.4	11.5	16.2	20.4
310.0	46	-3.30	5.8	10.3	14.6	18.3
315.0	42	-3.70	5.4	9.6	13.6	17.0
320.0	42	-4.00	5.3	9.4	13.3	16.7
330.0	34	-4.20	4.7	8.4	11.9	15.0
340.0	31	-4.00	4.5	8.1	11.4	14.3
350.0	31	-3.70	4.6	8.2	11.6	14.6

## Terrain Averages from NGDC 30-second Topographic database

Job Title:

Latitude: 36-06-33  
Longitude: 80-14-44

Bearing (Degrees true)	3.0 to 16.0 kilometer average terrain elevation (meters)	3.0 to 16.0 kilometer average terrain elevation (feet)
.0	264.5	867.8
* 15.0	282.8	927.8
* 30.0	274.6	900.9
* 45.0	282.3	926.2
* 60.0	273.4	897.0
* 75.0	271.9	892.1
* 90.0	269.8	885.2
* 105.0	270.8	888.5
* 120.0	266.9	875.7
* 135.0	262.0	859.6
* 150.0	255.6	838.6
* 165.0	253.8	832.7
* 180.0	247.2	811.0
* 195.0	237.2	778.2
* 210.0	232.2	761.8
* 225.0	241.0	790.7
* 240.0	244.4	801.8
* 255.0	250.2	820.9
* 270.0	253.0	830.1
* 285.0	254.4	834.6
* 300.0	252.5	828.4
* 315.0	259.1	850.1
* 330.0	266.8	875.3
* 345.0	277.4	910.1
Average:	259.9	852.7

\* = Radial not included in average

Average ( 9) radials:	259.5	851.4
Average (12) radials:	258.4	847.8
Average (18) radials:	259.5	851.4
Average (24) radials:	260.2	853.7
Average (36) radials:	259.4	851.0
Average (72) radials:	259.6	851.7

Exhibit G Figure 5  
TRIAD FAMILY NETWORK, INC

Triad Family Network, Incorporated

MISCELLANEOUS ALLOCATION STUDY - TV 6, Intermod, FM I.F.

Reference: 207C3 36-06-33 80-14-44 8.4 dBkW ERP

88.5 mc (class C) 100 kw 118 m HAAT  
WFDD Winston-Salem NC : 3.22 km (2.00 mi) @ 236.27 deg T

88.5 mc (class C) 38 kw 346 m HAAT  
WFDD Winston-Salem NC : 21.73 km (13.50 mi) @ 191.50 deg T

90.5 (class A) 0.12 kw 28 m HAAT  
WSNC Winston-Salem NC : 2.17 km (1.35 mi) @ 144.02 deg T

90.5 (Class A) 10 kw DA / 59 m HAAT  
BPED-870424MA Winsto NC : 2.99 km (1.86 mi) @ 135.35 deg T

91.3 mc (class A) 0.65 kw 4 m HAAT  
BPH -900802MD Winsto NC : 11.84 km (7.36 mi) @ 261.47 deg T

The following FM stations are beyond 10 km:

WTQR Winston-Salem NC : 31.66 km (19.67 mi) @ 338.39 deg T  
WMQX Winston-Salem NC : 32.87 km (20.42 mi) @ 55.95 deg T  
WKZL Winston-Salem NC : 16.56 km (10.29 mi) @ 50.74 deg T

I.F. Separations

(99.9 mc)

WKSF Asheville NC : 239.44 km (148.78 mi) @ 251.53 deg T  
Alloc Rocky Mount VA : 103.58 km (64.36 mi) @ 17.72 deg T  
Alloc Chase City VA : 177.26 km (110.15 mi) @ 64.44 deg T All IF clearances  
are well above requirements

(100.1 mc)

WQTR Lake City SC : 239.95 km (149.10 mi) @ 170.43 deg T  
WBXB Edenton NC : 329.01 km (204.43 mi) @ 89.80 deg T  
WKZZ Lynchburg VA : 167.89 km (104.32 mi) @ 34.97 deg T

Affected TV-6 Stations: (196 km minimum separation)

WECT Wilmington NC : 236.36 km (148.87 mi) @ 135.92 deg T  
WVVA Bluefield WV : 152.30 km (94.64 mi) @ 326.66 deg T \*\*\*\* ONLY AFFECTED  
WJBF Augusta GA : 333.65 km (207.32 mi) @ 205.92 deg T TV - 6  
WATE Knoxville TN : 333.36 km (207.14 mi) @ 267.99 deg T  
WTVR Richmond VA : 295.24 km (183.45 mi) @ 56.78 deg T

## EXHIBIT G FIGURE 6

Mr. David Anthony  
Concord, North Carolina

Page 1  
January 13, 1991

TRIAD FAMILY NETWORK, INC  
Intensive study - WVTF

## Terrain Averages from NGDC 30-second Topographic database

Job Title: Phil Watson (WVTF Roanoke)  
Center of Radiation 1182.8 m (3880.6 ft) A.M.S.L.

Latitude: 37-11-56  
Longitude: 80-09-02

Bearing (Degrees true)	3.0 to 16.0 kilometer average terrain elevation (meters)	3.0 to 16.0 kilometer average terrain elevation (feet)	Height above average terrain (meters)	Height above average terrain (feet)
.0	522.9	1715.6	659.9	2165.0
45.0	474.5	1556.8	708.3	2323.8
90.0	423.2	1388.5	759.6	2492.1
135.0	674.8	2213.9	508.0	1666.7
* 155.0	732.7	2403.9	450.1	1476.7
* 160.0	755.8	2479.7	427.0	1400.9
* 165.0	837.5	2747.7	345.3	1132.9
* 170.0	834.2	2736.9	348.6	1143.7
* 175.0	826.9	2712.9	355.9	1167.7
180.0	832.4	2731.0	350.4	1149.6
* 185.0	831.4	2727.7	351.4	1152.9
* 190.0	817.9	2683.4	364.9	1197.2
* 195.0	793.8	2604.3	389.0	1276.2
* 200.0	767.0	2516.4	415.8	1364.2
225.0	717.2	2353.0	465.6	1527.6
270.0	503.9	1653.2	678.9	2227.4
315.0	513.2	1683.7	669.6	2196.9
Average:	582.8	1912.1	600.0	1968.5

\* = Radial not included in average

Average ( 9 ) radials:	583.4	1914.0 C/R AMSL 1183.4	3882.5
Average (12) radials:	577.1	1893.4 C/R AMSL 1177.1	3861.9
Average (18) radials:	575.8	1889.1 C/R AMSL 1175.8	3857.6
Average (24) radials:	581.3	1907.2 C/R AMSL 1181.3	3875.7
Average (36) radials:	580.3	1903.9 C/R AMSL 1180.3	3872.4

## EXHIBIT G FIGURE 7

TRIAD FAMILY NETWORK, INC  
Intensive Study - W V T F

Lambert & Anthony, Consulting Engineers 1/15/91  
Distance to Contours Study: F(50,50) Coverage Contours  
89.1 mc (WTVF) Roanoke, Virginia  
HAAT based on 8 - radial HAAT of 600 metres  
Source: NGDC (Dataworld) 30 second database

Azimuth (degs)	HAAT (m)	ERP (dBk)	Contour Levels (dBuV)					
			115.0	100.0	80.0	70.0	60.0	54.0
.0	659	20.00	3.7	14.4	46.6	69.9	94.3	110.8
45.0	708	20.00	3.7	14.9	48.4	71.8	96.4	113.4
90.0	760	20.00	3.7	15.3	49.9	73.5	98.7	115.7
135.0	508	20.00	3.6	12.8	40.6	62.8	87.0	101.7
155.0	450	20.00	3.5	12.1	38.0	59.4	83.3	97.1
160.0	427	20.00	3.5	11.8	37.0	58.2	81.8	95.4
165.0	345	20.00	3.3	10.7	33.5	53.1	75.7	89.6
170.0	349	20.00	3.3	10.7	33.6	53.4	75.9	89.9
175.0	356	20.00	3.4	10.8	34.0	53.9	76.5	90.4
180.0	350	20.00	3.3	10.7	33.7	53.5	76.1	90.0
185.0	351	20.00	3.3	10.7	33.8	53.5	76.2	90.1
190.0	365	20.00	3.4	10.9	34.4	54.5	77.1	91.0
195.0	389	20.00	3.4	11.3	35.4	56.1	78.9	92.6
200.0	416	20.00	3.5	11.7	36.6	57.6	81.0	94.6
225.0	466	20.00	3.5	12.3	38.7	60.2	84.3	98.3
270.0	679	20.00	3.7	14.6	47.4	70.7	95.2	111.9
315.0	670	20.00	3.7	14.5	47.0	70.3	94.8	111.4

Standard 8 - radial HAAT reference:

XXXXX 600 20.00 3.7 13.9 44.3 67.5 91.7 107.5 119.0

Lambert & Anthony, Consulting Engineers  
Distance to Contours Study: F(50,10) Interference Contours.  
89.1 mc (WTVF) Roanoke, Virginia  
HAAT based on 8 - radial HAAT of 600 metres  
Source: NGDC (Dataworld) 30 second database

AZ (degs)	HAAT (m)	ERP (dBk)	CONTOUR LEVELS (dBu):				
			100.0	80.0	54.0	40.0	36.0
.0	660	20.00	14.7	52.5	139.7	202.0	225.1
45.0	708	20.00	15.2	54.3	142.0	205.4	228.5
90.0	760	20.00	15.8	56.2	144.3	209.0	231.9
135.0	508	20.00	12.9	45.6	130.1	191.4	213.3
155.0	450	20.00	12.2	42.1	123.9	187.1	208.6
160.0	427	20.00	11.8	40.7	121.4	185.2	206.7
165.0	345	20.00	10.7	36.2	111.4	177.5	199.0
170.0	349	20.0	10.7	36.4	111.8	177.8	199.4
175.0	356	20.00	10.8	36.8	112.8	178.6	200.2
180.0	350	20.00	10.7	36.5	112.1	178.0	199.6
185.0	351	20.00	10.7	36.5	112.2	178.1	199.7
190.0	365	20.00	10.9	37.2	114.0	179.6	201.1
195.0	389	20.00	11.3	38.6	117.0	181.9	203.4
200.0	416	20.00	11.7	40.0	120.2	184.3	205.8
225.0	466	20.00	12.4	43.1	125.6	188.3	209.9
270.0	679	20.00	14.9	53.2	140.6	203.4	226.5
315.0	670	20.00	14.8	52.9	140.2	202.7	225.8

Standard 8 - radial HAAT Class "C" Reference:

XXXXX 600 20.0 14.0 50.2 136.5 197.8 220.3